CLAIMS

What is claimed is:

1. A method for determining areas of sub-pixel regions formed by edges in a pixel, comprising:

receiving a first fill style to a first side of an edge, a second fill style to a second side of the edge, and a projected area of the edge to the second side of the edge; determining if there is a first sub-pixel region in a cell for the pixel having the first fill style;

if there is a first sub-pixel region in the cell having the first fill style:

incrementing a first area of the first sub-pixel region by the difference between one unit area of one pixel and the projected area;

modularizing the first area by one unit area;

if there is not a first sub-pixel region in the cell having the first fill style, saving in the cell a second sub-pixel region having (1) the first fill style and (2) a second area equal to a difference between one unit area and the projected area.

2. The method of claim 1, further comprising:

determining if there is a third sub-pixel region in the cell having the second fill style;

if there is a third sub-pixel region in the cell having the second fill style:

incrementing a third area of the third sub-pixel region by the projected area;

modularizing the fourth area by one unit area;

if there is not a third sub-pixel region in the cell having the second fill style, saving in the cell a fourth sub-pixel region having (1) the second fill style and (2) a fourth area equal to the projected area.

3. The method of claim 2, further comprising, prior to said determining if there is a first sub-pixel in the cell having the first fill style and said determining if there is a third sub-pixel in the cell having the second fill style:

determining if the cell is empty;

if the cell is empty:

saving in the cell the second sub-pixel region having (1) the first fill style and (2) the second area equal to the difference between one unit area and the projected area;

saving in the cell the fourth sub-pixel region having (1) the second fill style and (2) the fourth area equal to the projected area.

4. A method for determining areas of sub-pixel regions formed by edges in a pixel, comprising:

receiving a first fill style to a first side of an edge, a second fill style to a second side of the edge, and a projected area of the edge to the second side of the edge;

determining if a cell for the pixel is empty;

if the cell is empty:

saving in the cell a first sub-pixel region having (1) the first fill style and (2) a first area equal to a difference between one unit area of one pixel and the projected area;

saving in the cell a second sub-pixel region having (1) the second fill style and (2) a second area equal to the projected area;

if the cell is not empty:

determining if there is a third sub-pixel region in the cell having the first fill style;

if there is a third sub-pixel region in the cell having the first fill style:

incrementing a third area of the third sub-pixel region by the difference between one unit area and the projected area;

modularizing the third area by one unit area;

if there is not a third sub-pixel region in the cell having the first fill style, saving in the cell the first sub-pixel region having (1) the first fill style and (2) the first area equal to the difference between one unit area and the projected area.

determining if there is a fourth sub-pixel region in the cell having the second fill style;

if there is a fourth sub-pixel region in the cell having the second fill style:

incrementing a fourth area of the fourth sub-pixel region by the projected area;

modularizing the fourth area by one unit area;

if there is not a fourth sub-pixel region in the cell having the second fill style, saving in the cell the second sub-pixel region having (1) the second fill style and (2) the second area equal to the projected area.